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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/591,877	10/10/2006	Max Braun	14558-00001-US	4477
23416 7590 08/03/2007 CONNOLLY BOVE LODGE & HUTZ, LLP P O BOX 2207 WILMINGTON, DE 19899			EXAMINER CHO, JENNIFER Y	
			ART UNIT 1621	PAPER NUMBER
			MAIL DATE 08/03/2007	DELIVERY MODE PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/591,877	<b>Applicant(s)</b> BRAUN, MAX	
	<b>Examiner</b> Jennifer Y. Cho	<b>Art Unit</b> 1621	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 10 October 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-12 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-12 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☒ None of:
- ☒ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date <u>10/25/2006</u> | 6) <input type="checkbox"/> Other: _____  |

### **Detailed Action**

This office action is in response to Applicant's communication filed on 10/10/2006.

Claims 1-12 are pending in this application.

### **IDS**

The information disclosure statement (IDS) filed on 10/25/2006 is in compliance with the provisions of 37 CFR 1.97. Accordingly, the information disclosure statement is being considered by the examiner.

### **Priority Document**

Acknowledgment is made of applicant's claim for foreign priority based on an application filed in the EPO on 3/8/2004. It is noted, however, that applicant has not filed a certified copy of the EPO 04005507 application as required by 35 U.S.C. 119(b).

### **Claim Rejections – 35 USC 102**

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

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A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1, 3-11 are rejected under 35 U.S.C. 102b as being anticipated by Paleta et al. (Collection Czechoslov. Chem. Commun., 35, 1970, 1304-1305).

The instant claims are drawn to a hydrodehalogenation method for preparing compounds having a  $\text{CF}_n\text{HC}(\text{O})$  group from the reaction of a compound with a  $\text{CF}_n\text{XC}(\text{O})$  group and zinc, in an alcohol solvent. The instant claims are also drawn to the azeotrope of methyl difluoroacetate and methanol.

Paleta et al. teaches a hydrodehalogenation method of preparing methyl difluoroacetate from methyl difluorobromoacetate and zinc in methanol, and then further purifying the methanolic filtrate by fractional distillation (page 1304, last two lines; page 1305, first paragraph). The acid chloride can also be used as a reactant in the hydrodehalogenation reaction (page 1303, compound IIIa and IV). The azeotrope of methyl difluoroacetate and methanol is inherent in the distillation process. Therefore these claims are fully met.

### **Claim Rejections - 35 USC 103**

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

Claims 1-12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Paleta et al. (Collection Czechoslov. Chem. Commun., 35, 1970, 1304-1305), in view of Cordier et al. (US 6,509,495).

The instant claims are drawn to a hydrodehalogenation method for preparing compounds having a  $\text{CF}_n\text{HC(O)}$  group from the reaction of a compound with a  $\text{CF}_n\text{XC(O)}$  group and zinc, in an alcohol solvent.

Paleta et al. teaches a hydrodehalogenation method of preparing methyl difluoroacetate from methyl difluorobromoacetate and zinc in methanol (page 1304, last two lines; page 1305, first paragraph).

Paleta et al. is deficient in the sense that **X** is bromine, not chlorine for the  $\text{CF}_n\text{XC(O)}$  group reactant.

Cordier et al. teaches the equivalency of bromine and chlorine for a halogen-substituted reactant in a hydrodehalogenation reaction (abstract; column 4, lines 31-36).

Therefore, it would be prima facie obvious to one of ordinary skill in the art at the time of the invention, to utilize the teaching of Cordier et al., for the substitution of chlorine for bromine on the reactant of Paleta et al. There is no showing of unusual

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and/or unexpected results over applicant's particular chlorinated reactant. The expected result is the hydrodechlorination of methyl difluorochloroacetate to produce methyl difluoroacetate, a valuable intermediate for the chemical industry.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jennifer Y. Cho whose telephone number is (571) 272 6246. The examiner can normally be reached on 9 AM - 6 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Yvonne Eyler can be reached on (571) 272 0871. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Jennifer Cho  
Patent Examiner  
Art Unit: 1621



FOR

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Yvonne Eyler  
Supervisory Patent Examiner

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